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ATTORNEY DOCKET NO. CONFIRMATION NO. FIRST NAMED INVENTOR APPLICATION NO. FILING DATE Eric R. Alling 51108 9149 09/837,699 08/02/2001 **EXAMINER** 7590 09/01/2005 DESHPANDE, KALYAN K Dike, Bronstein, Roberts & Cushman Intellectual Property Practice Group ART UNIT PAPER NUMBER **EDWARDS & ANGELL** P.O. Box 9169 3623 Boston, MA 02209

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	09/837,699	ALLING, ERIC R.	
	Examiner	Art Unit	
	Kalyan K. Deshpande	3623	
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply			
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).			
Status			
1)⊠ Responsive to communication(s) filed on <u>02 August 2001</u> .			
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.			
Disposition of Claims			
4) Claim(s) 1-32 is/are pending in the application.			
4a) Of the above claim(s) is/are withdrawn from consideration.			
5) Claim(s) is/are allowed.			
6)⊠ Claim(s) <u>1-32</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/or election requirement.			
Application Papers			
9)⊠ The specification is objected to by the Examiner.			
10)⊠ The drawing(s) filed on <u>02 August 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.			
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).			
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.			
Priority under 35 U.S.C. § 119			
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>			
Attachment(s)			
1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	/ (PTO-413)	
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	Pate	
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	Patent Application (PŤO-152)	

### **DETAILED ACTION**

#### Introduction

The following is a non-final office action in response to the communications 1. received on August 2, 2001. Claims 1-32 are now pending in this application.

## Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because the abstract exceeds 150 words. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

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3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The basis of this rejection is set forth in a two-prong test of:

- (1) whether the invention is within the technological arts; and
- (2) whether the invention produces a useful, concrete, and tangible result.

For a claimed invention to be statutory, the claimed invention must be within the technological arts. Mere ideas in the abstract (i.e., abstract idea, law of nature, natural phenomena) that do not apply, involve, use, or advance the technological arts fail to promote the "progress of science and the useful arts" (i.e., the physical sciences as opposed to social sciences, for example) and therefore are found to be non-statutory subject matter. For a process claim to pass muster, the recited process must somehow apply, involve, use, or advance the technological arts.

Mere intended or nominal use of a component, albeit within the technological arts, does not confer statutory subject matter to an otherwise abstract idea if the component does not apply, involve, use, or advance the underlying process.

In the present case, claims 1-13 only recite an abstract idea. The recited steps of merely facilitating product development processes does not apply, involve, use, or advance the technological arts since all of the recited steps can be performed in the mind of the user or by use of a pencil and paper. These steps only constitute an idea of how to facilitate the product development processes.

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Although the recited process produces a useful, concrete, and tangible result, since the claimed invention, as a whole, is not within the technological arts as explained above, claims 1-13 are deemed to be directed to non-statutory subject matter.

### Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 6. Claims 1, 2, 6-21, and 25-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Han et. al. (U.S. 2002/0052807).

As per claim 1, Han teaches:

A method for facilitating product development processes within a multi-enterprise environment via a computer network, said multi-enterprise environment including a product development enterprise and at least one customer enterprise, comprising:

providing access to a web site of said product development enterprise by said at least one customer enterprise via said computer network (see ¶¶ 90; where a participant points his browser to the product design main web page);

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providing access to an account maintained on behalf of said customer

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quote and the RFQ is assigned a specific number the customer uses to track the RFQ. Thus the RFQ acts as a customer account

enterprise (see ¶¶ 94; where a customer initiates a request for a

that the customer can maintain via the website.);

receiving data inputs pertaining to a product development request, said product development request originating from said customer enterprise (see ¶¶ 63 and 83; where a participant uses the product design application service in order to make modifications to the product definition);

- storing said data inputs in a data storage device (see ¶¶ 84; where the requested modification replaces the subsisting product definition and the participant can store the modification request in any database maintained by the participant);
- extracting said data inputs for review and analysis (see ¶¶ 88; where a rules engine evaluates the modification request and determines whether the combination of products is permissible);
- establishing a product development plan in response to said review and said analysis (see ¶¶ 87; where inter-product specification data is created showing what type of features will be needed for the combination of parts and plans how the final product should be authored);

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executing said product development plan (see figure 9(C)(2); where once the rules engine permits the combination of parts, the whole product is authored);

wherein said product development enterprise is running a product specification and development application for implementing said product development processes (see ¶¶ 45 and 46; where the invention is described as a design-to-order development application and the product information utilized is in the form of product definition data).

As per claim 2, Han teaches:

The method of claim 1, further comprising:

receiving data inputs pertaining to said product development, wherein said inputs are provided by a research and development organization (see ¶¶ 64; where an engineering participation suite is included allowing engineering the ability to make new designs and manipulate the animation engine responsible for communicating product usage. Since engineering is creating new designs, they are doing research and development and are interpreted as a research organization).

As per claim 6, Han discloses:

The method of claim 1, wherein said data inputs include product specifications (see ¶¶ 83; where a participant uses the product design

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application service in order to make modifications to the product definition, where the product definition is the product specification)

As per claim 7, Han discloses:

The method of claim 1, wherein said data inputs include product specifications changes (see ¶¶ 83; where a participant uses the product design application service in order to make modifications to the product definition).

As per claim 8, Han discloses:

The method of claim 1, wherein said data inputs include process technology changes (see ¶¶ 83 and 87; where a participant uses the product design application service in order to make modifications to the product definition and these modifications change what type of features the product will have and the additional procedures necessary to incorporate these features).

As per claim 9, Han discloses:

The method of claim 1, wherein said data inputs are received at a plurality of points throughout a product development cycle (see ¶¶ 83 and 94; where a participant uses the product design application service in order to make modifications to the product definition at one point and where a customer can create and edit a request for quote for a needed service or product at another point)

As per claim 10, Han discloses:

The method of claim 1, wherein said extracting said data inputs occurs at a plurality of points throughout a product development cycle (see ¶¶ 87 and 94; where, based on the data extracted, inter-product specification data is created showing what type of features will be needed for the combination of parts and how the final product should be authored, and where a community participant can review the RFQ and define the players, assigned roles, and the interaction workflow).

As per claim 11, Han discloses:

The method of claim 1, wherein said extracting said data inputs for said review and analysis causes refinements to be made in said product development plan (see ¶¶ 87; where inter-product specification data is created showing what types of features will be needed for the combination of parts and how the final product should be authored);

As per claim 12, Han discloses:

The method of claim 1, wherein said customer enterprise is a supplier (see ¶¶ 60, 95, and figure 3; where suppliers can be participants).

As per claim 13, Han discloses:

The method of claim 1, wherein said customer enterprise is a manufacturer (see figure 3; where manufacturers can be participants).

As per claim 14, Han teaches:

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A system for facilitating product development processes within a multi-enterprise environment via a computer network, said multi-enterprise environment including:

a product development enterprise, comprising;

a server located on a host system (see figure 2B; where a server is located on a host system);

at least one terminal (see figure 2B; web clients are terminals used to access the server);

a data storage device (see figure 2B; where a storage device is listed); and

a network for allowing said host system, said at least one terminal and said data storage device to communicate (see figure 2B; where the server on the host system and the database are on an intranet allowing them to communicate and the web clients and host system can communicate via the internet);

at least one customer enterprise, comprising:

a server (see figure 2A; a server is present);

at least one terminal (see figure 2A; where web clients are terminals used to access the internet and servers);

a network for allowing said terminal and said server to communicate; and a communications network for allowing said at least one customer enterprise to communicate with said product development

enterprise (see figure 2A; where a the web clients and the server communicate via the internet, the server (the customer enterprise) and product development enterprise communicate via the internet);

Wherein said product development enterprise is running a product specification and development application for implementing said product development processes (see ¶¶ 45 and 46; where the invention is described as a design-to-order development application and the product information utilized is in the form of product definition data)

As per claim 15, Han discloses:

The system of claim 14, wherein said product development enterprise:

Receives data inputs from said at least one customer enterprise (see ¶¶ 83; where a participant uses the product design application service in order to make modifications to the product definition); and

Executes said product specification and development application; wherein said data inputs are collected and analyzed by said product specification and development application (see ¶¶ 88; where a rules engine of the application evaluates the modification request and determines whether the combination of products is permissible);

Develop and implement a product development plan based upon said results of execution of said product specification and development application (see ¶¶ 89; where once the rules engine determines the

combination of parts and plans the necessary features to add, the whole product is authored).

As per claim 16, Han discloses:

The system of claim 15, wherein said product development plan is further refined based upon results of further execution of said product specification and development application (see ¶¶ 89; where the product specification is refined as a result of applying multiple rules to combine all of the parts).

As per claim 17, Han discloses:

The system of claim 14, wherein said data inputs are received throughout the development cycle (see ¶¶ 87 and 94; where, based on the data extracted, inter-product specification data is created showing what type of features will be needed for the combination of parts and how the final product should be authored, and where a community participant can review the RFQ and define the players, assigned roles, and the interaction workflow).

As per claim 18, Han discloses:

The system of claim 14, wherein said at least one customer enterprise is a trading partner of said product development enterprise (see ¶¶ 60; where partners are included as members of the company's valued network who participate).

As per claim 19, Han discloses:

The system of claim 14, wherein said at least one customer enterprise is a research organization (see ¶¶ 64 and figure 3; where engineering is included as participants and engineering is responsible for new product designs. Engineering is thus performing research and development to develop the new product designs and is therefore interpreted as a research organization).

Claims 20-21 and 25-32 recite limitations already addressed by the rejection of claims 1-2 and 6-13; therefore the same rejection applies to these claims.

### Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claim 3-5 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Han et. al. (U.S. 2002/0052807) as applied to claims 1 and 20 above.

As per claim 3, Han fails to teach:

wherein said inputs are provided by a marketing enterprise.

Han discloses a Team Participation Suite and an Enterprise Participation Suite, which create an interactive on-line environment where every member of the company's valued network can have participation with a product (see ¶¶ 60 and 61; Team

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Participation and Enterprise Participation Suites). Han describes the company's valued network as customers, internal departments, suppliers, partners, and channels. It is old and well known to one skilled in product development to include a marketing enterprise as one of the internal departments described by Han. The advantage of including a marketing enterprise would be to analyze and provide feedback for a customer facing application. A marketing enterprise could further provide competitor information, customer profiles, and the best methods to market the product. Examiner submits that at the time of the invention it would have been obvious to one of ordinary skill in product development to include a marketing enterprise as a member of the company's valued network in order to provide competitor information, customer profiles, the best methods to market, and to analyze and provide feedback for a customer facing application, thereby enhancing the quality of inputs received and improving the overall product development (see ¶¶ 12; where Han describes a goal of the application is to facilitate the design process to reach the right design that is cheapest for the manufacturer and best for the consumer).

As per claim 4, Han teaches:

The method of claim 2, wherein said inputs provided by said research and development organization include:

new process technology (see ¶¶ 64; where an engineering participation suite is included allowing engineering the ability to make new designs and the procedures to combine these new designs with existing ones);

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new applications for existing properties of a product or product element (see ¶¶ 64; where an engineering participation suite is included allowing engineering the ability to make new designs and manipulate the animation engine responsible for communicating product usage)

As per claim 4, Han fails to disclose:

industry standards pertaining to a product or process.

Official notice is taken that it is old and well known in research and development to recognize the current industry standards and develop products or processes that provide some advantage over current industry offerings. Research and development organizations by virtue investigate the current industry standards to develop new technologies. For example, a research and development organization will research a technology by examining current patents and develop a new or improved technology different from existing technology. Examiner submits that at the time of the invention it would have been obvious to one of ordinary skill in research and development to provide the industry standards pertaining to a product or process in order to allow all internal departments to create a strategy to develop a new or improved product or process that has advantages to what is currently offered in the industry.

As per claim 5, Han fails to disclose:

wherein said inputs provided by said marketing enterprise include:

new trends in consumer behavior;

economic or market conditions influencing said consumer behavior;

competitor analysis;

Official notice is taken that it is old and well known in marketing for a marketing enterprise to provide information on new trends in consumer behavior, economic or market conditions influencing consumer behavior, and competitor analysis for the development of a product. Each of these factors gauge the success rate for a product in any given market. At the time of the invention it would have been obvious to one of ordinary skill in product development to include a marketing enterprise's participation in the development of a product and to allow for the marketing enterprise to deliver data on new trends in consumer behavior, economic or market conditions influencing consumer behavior and competitor analysis in order to understand the chance of success of the developed product, thereby enhancing the quality of inputs received and improving the overall product development (see ¶¶ 12; where Han describes a goal of the application is to facilitate the design process to reach the right design that is cheapest for the manufacturer and best for the consumer).

Claims 22-24 recite limitations already addressed by the rejection of claims 3-5; therefore the same rejection applies to these claims.

### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following are pertinent to the current invention, though not relied upon:

Balakrishnan (Balakrishnan, A., Kumara, S., Sundaresan, S., "Manufacturing in the Digital Age: Exploiting Information Technologies for Product Realization",

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Information Systems Frontiers, Jul. 1999) discloses the use of information technology to increase customer participation in product development.

Huang (Huang, G.Q., Feng, X.B., Mak, K.L., "POPIM: Pragmatic Online Project Information Management for Collaborative Product Development", *Computer Supported Cooperative Work in Design, The Sixth International Conference on July 12-14*, 2001) discloses a web-based platform for managing collaborative product development projects within an extended enterprise.

Xie (Xie, Helen, "Tracking of Design Changes for Collaborative Product Development", in Computer Supported Cooperative Work in Design, The Sixth International Conference on, 2001, pp. 175 – 180) discloses the analysis of design processes to identify product data for tracking design changes.

Rayson (Rayson, P., "Relate, Empower, and Free", *Manufacturing Engineer*, February, 2001, pp 8-12) discloses the development and current state of collaborative commerce.

Pahng (Pahng, G., Seockhoon, Bae, Wallace, D., "A Web-based collaborative design modeling environment", Enabling Technologies: Infrastructure for Collaborative Enterprises, 1998. (WET ICE '98) Proceedings, Seventh IEEE International Workshops on 17-19 June 1998, p. 161 – 167) discloses an collaborative and integrated open development environment.

Stewart et. al. (U.S. 2002/0161688) discloses an enterprise wide electronic commerce system with communication between participants via a collaboration hub.

Eischstedt et. al. (U.S. 2002/0016725) discloses a system and method for collaborative design of fluid processing plans.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalyan K. Deshpande whose telephone number is (571) 272-5880. The examiner can normally be reached on M-F 8am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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O. Michelle Colón Patent Examiner Art Unit 3623